

### **Amendments to the Claims**

Please amend the claims of the present application as set forth below.

Claims 1 – 37 were originally filed.

**New Claims 38 – 43 are added in this response.**

Claims 1 – 43 are pending.

1. (original) A method for controlling access to a server device by at least one client device that is operatively coupled to the server device through at least one interconnecting network, the method comprising:

causing a user-side portion of a network server logic within the server device to selectively specify at least one network from which the user-side portion would accept client device information; and

causing a kernel-side portion of the network server logic to accept the client device information only if the client device information has been provided via the specified network.

2. (original) The method as recited in Claim 1, further comprising:  
if the client device information has not been provided via the specified  
network, causing the kernel-side portion to reject the client device information and  
notify the client device in a manner that identifies the rejection.

3. (original) The method as recited in Claim 2, wherein the kernel-side portion notifies the client device using at least one message selected

1 from a group of messages comprising a TCP reset message and an ICMP  
2 destination unreachable message, as applicable.

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4 4. (original) The method as recited in Claim 1, further comprising:  
5 providing a communication socket for use by the kernel-side portion; and  
6 causing the kernel-side portion to compare client device information  
7 received on the communication socket to the specified network.

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9 5. (original) The method as recited in Claim 1, wherein causing the  
10 user-side portion to selectively specify at least one network from which the user-  
11 side portion would accept the client device information, further includes causing  
12 the user-side portion to selectively specify a plurality of networks from which the  
13 user-side portion would accept the client device information; and  
14 wherein causing the kernel-side portion to accept the client device  
15 information only if the client device information has been provided via the  
16 specified network, further includes causing the kernel-side portion to accept the  
17 client device information only if the client device information has been provided  
18 via at least one of the specified plurality of networks.

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20 6. (original) The method as recited in Claim 1, wherein causing the  
21 user-side portion to selectively specify the at least one network from which the  
22 user-side portion would accept the client device information further includes  
23 having the user-side portion specify at least one local network interface.

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1       7. (original) The method as recited in Claim 1, wherein causing the  
2 user-side portion to selectively specify the at least one network from which the  
3 user-side portion would accept the client device information further includes  
4 having the user-side portion specify at least one IP address.

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7       8. (original) The method as recited in Claim 1, wherein the network  
8 server logic is operatively configured to support at least one client-server based  
9 process selected from a group of processes comprising a file-sharing  
10 communication process, a TCP-based communication process, a UDP-based  
11 communication process, a HTTP-based communication process, a digital media  
12 based communication process, a DNS-based communication process, and a  
13 database related communication process.

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15       9. (original) The method as recited in Claim 1, wherein the user-  
16 side portion includes an application-programming interface (API) operatively  
17 configured to allow an application to specify the at least one network from which  
18 the user-side portion would accept the client device information.

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20       10. (original) The method as recited in Claim 9, wherein the API is  
21 further operatively configured to allow the application to specify a listing of  
22 networks from which the user-side portion would accept the client device  
23 information.

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1       11. (original) The method as recited in Claim 10, wherein the API is  
2 further operatively configured to allow the application to selectively modify the  
3 listing of networks from which the user-side portion would accept the client device  
4 information.

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6       12. (original) The method as recited in Claim 1, wherein the kernel-  
7 side portion includes a TCP/IP driver.

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9       13. (original) A computer-readable medium having computer-  
10 executable instructions for performing steps comprising:

11           causing a user-side portion of a network server logic within a server device  
12 to selectively specify at least one network from which the user-side portion would  
13 accept client device information; and

14           causing a kernel-side portion of the network server logic to accept the  
15 client device information only if the client device information has been provided  
16 via the specified network.

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18       14. (original) The computer-readable medium as recited in Claim 13,  
19 further comprising computer-executable instructions for:

20           if the client device information has not been provided via the specified  
21 network, causing the kernel-side portion to reject the client device information and  
22 notify the client device in a manner that identifies the rejection.

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24       15. (original) The computer-readable medium as recited in Claim 14,  
25 wherein the kernel-side portion notifies the client device using at least one

1 message selected from a group of messages comprising a TCP reset message and  
2 an ICMP destination unreachable message, as applicable.

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4 16. (original) The computer-readable medium as recited in Claim 13,  
5 further comprising computer-executable instructions for:

6 providing a communication socket for use by the kernel-side portion; and  
7 causing the kernel-side portion to compare client device information  
8 received on the communication socket to the specified network.

9  
10 17. (original) The computer-readable medium as recited in Claim 13,  
11 wherein causing the user-side portion to selectively specify at least one network  
12 from which the user-side portion would accept the client device information,  
13 further includes causing the user-side portion to selectively specify a plurality of  
14 networks from which the user-side portion would accept the client device  
15 information; and

16 wherein causing the kernel-side portion to accept the client device  
17 information only if the client device information has been provided via the  
18 specified network, further includes causing the kernel-side portion to accept the  
19 client device information only if the client device information has been provided  
20 via at least one of the specified plurality of networks.

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22 18. (original) The computer-readable medium as recited in Claim 13,  
23 wherein causing the user-side portion to selectively specify the at least one  
24 network from which the user-side portion would accept the client device

1 information further includes having the user-side portion specify at least one local  
2 network interface.

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4 19. (original) The computer-readable medium as recited in Claim 13,  
5 wherein causing the user-side portion to selectively specify the at least one  
6 network from which the user-side portion would accept the client device  
7 information further includes having the user-side portion specify at least one IP  
8 address.

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10 20. (original) The computer-readable medium as recited in Claim 13,  
11 wherein the network server logic is operatively configured to support at least one  
12 client-server based process selected from a group of processes comprising a file-  
13 sharing communication process, a TCP-based communication process, a UDP-  
14 based communication process, a HTTP-based communication process, a digital  
15 media based communication process, a DNS-based communication process, and a  
16 database related communication process.

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18 21. (original) The computer-readable medium as recited in Claim 13,  
19 wherein the user-side portion includes an application-programming interface (API)  
20 operatively configured to allow an application to specify the at least one network  
21 from which the user-side portion would accept the client device information.

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23 22. (original) The computer-readable medium as recited in Claim 21,  
24 wherein the API is further operatively configured to allow the application to

1 specify a listing of networks from which the user-side portion would accept the  
2 client device information.

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4 23. (original) The computer-readable medium as recited in Claim 22,  
5 wherein the API is further operatively configured to allow the application to  
6 selectively modify the listing of networks from which the user-side portion would  
7 accept the client device information.

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9 24. (original) The computer-readable medium as recited in Claim 13,  
10 wherein the kernel-side portion includes a TCP/IP driver.

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12 25. (original) A method for establishing per-socket interface listings,  
13 the method comprising the steps of:

14 a) issuing, by a user-side application, at least one network identifier  
15 from which the user-side application would accept client device information;

16 b) receiving, by a user-side portion of a network server process, the at  
17 least one network identifier;

18 c) issuing, by the user-side portion, the at least one network identifier;  
19 and

20 d) receiving, by a kernel-side portion of a network server process, the at  
21 least one network identifier.

1       26. (original) An apparatus comprising:  
2              memory; and  
3              network server logic, operatively coupled to the memory and configurable  
4              to support at least one client-server communication session, the network server  
5              logic having:

6              a user-side portion that is configured to selectively specify at least one  
7              network from which the user-side portion would accept client device information,  
8              and

9              a kernel-side portion that is configured to accept the client device  
10             information only if the client device information has been provided via the  
11             specified network.

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13        27. (original) The apparatus as recited in Claim 26, wherein if the  
14             client device information has not been provided via the specified network, the  
15             kernel-side portion is further configured to reject the client device information and  
16             notify the client device in a manner that identifies the rejection.

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18        28 (original) The apparatus as recited in Claim 27, wherein the  
19             kernel-side portion is configured to notify the client device using at least one  
20             message selected from a group of messages comprising a TCP reset message and  
21             an ICMP destination unreachable message, as applicable.

1        29. (original) The apparatus as recited in Claim 26, further  
2 comprising:

3              a communication socket for use by the kernel-side portion during the  
4 communications session, and wherein the kernel-side portion is further configured  
5 to compare client device information received on the communication socket to the  
6 specified network.

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8        30. (original) The apparatus as recited in Claim 26, wherein is  
9 further configured to selectively specify a plurality of networks from which the  
10 user-side portion would accept the client device information; and

11              wherein the kernel-side portion is further configured to accept the client  
12 device information only if the client device information has been provided via at  
13 least one of the specified plurality of networks.

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15        31. (original) The apparatus as recited in Claim 26, wherein the user-  
16 side portion is further configured to specify at least one local network interface.

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18        32. (original) The apparatus as recited in Claim 26, wherein the user-  
19 side portion is further configured to specify at least one IP address.

1       33. (original) The apparatus as recited in Claim 26, wherein the  
2 communication session is further configured to support at least one communication  
3 process selected from a group of communication processes comprising a file-  
4 sharing communication process, a TCP-based communication process, a UDP-  
5 based communication process, a HTTP-based communication process, a digital  
6 media based communication process, a DNS-based communication process, and a  
7 database related communication process.

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9       34. (original) The apparatus as recited in Claim 26, wherein the user-  
10 side portion includes:

11           an application-programming interface (API) operatively configurable to  
12 allow an application to specify the at least one network from which the user-side  
13 portion would accept the client device information.

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15       35. (original) The apparatus as recited in Claim 34, wherein the API  
16 is further operatively configurable to allow the application to specify a listing of  
17 networks from which the user-side portion would accept the client device  
18 information.

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20       36. (original) The apparatus as recited in Claim 35, wherein the API  
21 is further operatively configurable to allow the application to selectively modify  
22 the listing of networks from which the user-side portion would accept the client  
23 device information.

1       37. (original) The apparatus as recited in Claim 26, wherein the  
2 kernel-side portion includes a TCP/IP driver.

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4       38. (new) A method for controlling connections to a server device  
5 comprising:

6             creating a listening socket bound to a wildcard network interface;  
7             specifying a list of local network interfaces on which connection is  
8 permitted through the listening socket;  
9             accepting a request for connection on the listening socket only if the request  
10 is received on one of the local network interfaces specified in the list of local  
11 network interfaces.

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13       39. (new) The method as recited in claim 38 further comprising:

14             receiving a request for connection on a network interface;  
15             querying a network stack to determine the network interface on which the  
16 request was received;  
17             comparing the network interface to each of the local network interfaces  
18 specified in the list of local network interfaces.

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20       40. (new) The method as recited in claim 38 further comprising:  
21             receiving a request for connection on a network interface;  
22             identifying the network interface in the list of local network interfaces.

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24       41. (new) The method as recited in claim 38 wherein the specifying  
25 comprises specifying a list of internet protocol (IP) addresses.

1       42. (new) The method as recited in claim 38 further comprising: in  
2 response to an application issuing a control message, adding a local network  
3 interface to the list of local network interfaces.

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5       43. (new) The method as recited in claim 38 further comprising: in  
6 response to an application issuing a control message, deleting a local network  
7 interface from the list of local network interfaces.

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